

## SINGLE-ENDED-TO-DIFFERENTIAL CONVERTER WITH COMMON-MODE VOLTAGE CONTROL

### ABSTRACT OF THE DISCLOSURE

Provided is a circuit to perform single-ended to differential conversion while providing common-mode voltage control. The circuit includes a converter to convert a single-ended signal to a differential signal and a stabilizing circuit adapted to receive the differential signal. The stabilizing circuit includes a sensor configured to sense a common-mode voltage level of the differential signal and a comparator having an output port coupled to the converter. The comparator is configured to compare the differential signal common-mode voltage level with a reference signal common-mode voltage level and produce an adjusting signal based upon the comparison. The adjusting signal is applied to the converter via the output port and is operative to adjust a subsequent common-mode voltage level of the differential signal.